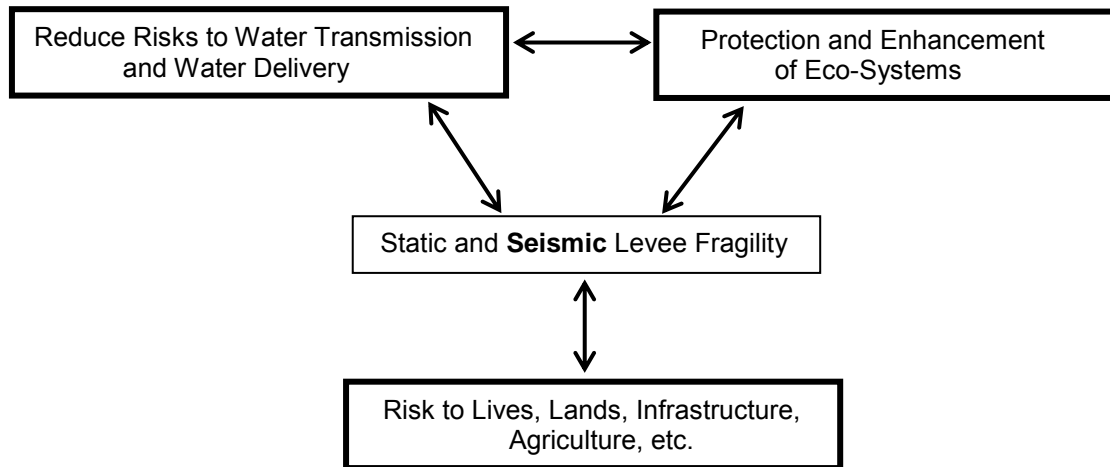


Delta Stewardship Council Meeting of March 10-11, 2011

Panel C: Reduce Risks to People, Property, and State Interests in the Delta

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1. Top three priorities....



1. Seismic levee risk is very different from non-seismic risk
 - (a)and it is poorly understood by most.
 - (b) It has the greatest risk/catastrophe potential.
 - (c) It is the most difficult to deal with (costly: \$) in terms of levee upgrades.
 - (d) Alternate, seismically secure facilities would be the best solution.
 - (e) Difficulties include governance, trust, who decides/allocates water resources, guarantees, who pays, etc.
 - (f) First "civil engineering" issue to make the President's list of the top ten strategic threats to the Nation.

New opportunities —> DSC & State should explore.....?
2. Static (non-seismic risk) is better understood, and we have long experience with this.
 - (a) It can be managed and dealt with at some cost.
 - (b) Difficult decisions need to be mad regarding the costs that can or should be borne.
 - (c) Cost-benefit decisions cannot (should not) just value agriculture and Infrastructure, etc. —> "Delta as Place"

3. Opportunities (and need) for more creative thinking

- (a) The deep, central/western Delta is the most difficult to protect from conventional (non-seismic) levee failures and flooding.
- (b) The deep, central/western Delta is the most seismically fragile, and it is closest to most of the potentially critical seismic faults.
- (c) Defending the Delta need not be an all-or-nothing proposition. (70/30?)
- (d) Innovative use of land and geography
 - Carbon sequestration farming?
 - Eco-system friendly agriculture?
 - Partial re-forestation?
- (e) Make deliberate and deliberative decisions as to what we will defend. (That may be most of it.) Make plans for ceding the rest to other purposes..... or risk letting Nature control that in unpredictable ways.

4. Priorities for other things to protect, or to consider protecting.

(a) Human life

- Sparsely populated islands and tracts vs. legacy towns, etc.
- Three options: protect, respond/rescue, or relocate
- Any of these must be taken seriously, and implemented in a manner such that they will be successful. Combinations are usually best.
- Not an option: none of the above.

(b) Infrastructure

- Mokelumne Aqueduct lines
- Highways
- Railroads
- PG&E gas storage
- Buried pipelines and overhead electrical transmission lines, etc.
- Other.....

(c) Land

5. Other priority issues

- Flood bypass for the San Joaquin River system (before the land is developed and such a bypass becomes infeasible.)
- Prevention of irresponsibly risky Development